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Niny Arcila-Maya* (ninyam@math.ubc.ca). *Decomposition of Topological Azumaya Algebras*. Preliminary report.

An Azumaya algebra of degree n over X is a bundle of algebras over X that is locally isomorphic to the matrix algebra. The tensor product of algebras can be extended to Azumaya algebras by performing the operation fiberwise. In topology, we can give conditions for positive integers m and n and the space X such that a topological Azumaya algebra of degree mn can be decomposed as the tensor product of Azumaya algebras of degrees m and n , but no such conditions are known in algebra. We will explain the topological proof and indicate the difficulties in extending these to the algebraic context. (Received January 21, 2020)